

# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460

September 21, 1987

OFFICE OF SOLID WASTE AND EMERGENCY RESPONSE

SUBJECT: Pasco Sanitary Landfill (Resource Recovery), Washington

FROM:

Dottie Pipkin Watte Pipkin

Office of Waste Programs Enforcement

TO:

Barbara Cane Region X

Per your request, attached is the REM/FIT contract letter report from Ecology and Environment (68-01-6692) for the Pasco site. I am sorry for the delay this has caused your Region. If you have questions,

Attachments

please call me.

SEP 221987 Superfund Branch





## ecology and environment, inc.

195 SUGG ROAD, P.O. BOX D, BUFFALO, NEW YORK 14225, TEL. 716-632-4491, TELEX 91-9183

International Specialists in the Environment

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T0:

Ms. Dorothy Pipkin

US Environmental Protection Agency

OWPE (WH-527) 401 M Street, S.W. Washington, DC 20460

FROM:

Louis W. Adams

REM/FIT Coordinator

DATE:

September 17, 1987

SUBJECT:

Obtaining Cost Recovery Data Related to REM/FIT Activities

Performed Under EPA Contract No. 68-01-6692 - Pasco Sanitary Landfill A/K/A Resource Recovery Corp., Pasco,

Wash. (10T67)

REFERENCES: (1) Telecon D. Pipkin, EPA Enforcement and J. E. Strickland, E & E Contract Admin., April 30, 1987

(2) CDM Subcontract No. TESK-CO-554-01 dated September 16, 1987

Contract No.

IN REPLY REFER TO: EF-4610

As requested in References (1) and (2) above, our records reveal five (5) Technical Direction Documents (TDDs) and one (1) Subcontract relating to subject site. The Field Investigation Team (REM/FIT) Level of Effort (LOE) hours expended were for site investigation and associated enforcement action. The total estimated cost for the field investigation effort conducted under the five TDDs and one subcontract is as follows:

Total LOE Hours, Per Attachment No. 1
Apply Factor for Non-TDD Technical
 Effort, Per Attachment No. 2
Total Hours
Cost Per LOE Hour - Program-wide
 Average, Per Attachment No. 3
Total
Subcontractor's Cost, Per Attachment No. 2
Total
E & E Cost for Preparing this Report
Total Estimated Cost

68-0	1-6692 (REM/FIT) an. 31, 1987	
	3,162	
X	1.349	
	4,266	
\$	42.49	
\$	181,262.34	
<del>_</del>	46,796.00	
\$	288,058.34	
	1,800.00	
\$	289,858.34	
-		

Page 2 September 17, 1987 Ms. D. Pipkin

As requested, copies of the Technical Direction Documents and Acknowledgements of Completion are attached herewith.

Please note that the cost analysis provided herein does not consider EPA internal contract management cost nor the cost of any sample analysis performed by EPA or contract laboratories. Such cost can be obtained through EPA channels, if deemed appropriate.

The information contained in this report is a complete and accurate summary of the available REM/FIT cost information contained in our record-keeping process, to the best of our knowledge and belief.

Should there be any questions with respect to the above, please contact the undersigned at 716/632-4491.

Respectfully submitted,

N. Ham &

Louis W. Adams

REM/FIT Coordinator

#### ATTACHMENT NO. 1

Pasco Sanitary Landfill, A/K/A Resource Recovery Corp., Pasco, Wash. (10TG7)
Recap of Technical Direction Documents (TDDs) together with
Acknowledgements of Completion and Level of Effort (LOE) Hours

TDD NO.	DESCRIPTION	PERIOD COVERED	LOE HOURS
R10-8212-02A	Review all consolidated files from Air and Waste Division. Evaluate files to eliminate backlog and to select sites for further study.	April 10, 1983 to May 26, 1983	1 (A)
R10-8408-22	Perform site inspection at Resource Recovery Corp., Pasco, Wash.	Aug. 8, 1984 to April 6, 1985	337
R10-8410-06	Quality assurance review of samples collected at Resource Recovery Corp.	Oct. 19, 1984 to Dec. 3, 1984	21
R10-8410-14	Tier 2A dioxin sampling of soils, sediments and water at Resource Recovery Landfill, Pasco, WA.	Oct. 19, 1984 to June 23, 1986	2,796
R10-8507-01	Quality assurance review of analytical results.	July 1, 1985 to Oct. 7, 1985	7 (B)
Total LOE Hour	s - Contract No. 68-01-6692 (REM/FIT)		3,162

### NOTES:

- (A) As indicated, this TDD covered an unknown number of sites. In order to ascertain the number of LOE hours associated with subject site, we contacted out Region X office in Seattle and they advised us that they estimated LOE hours based upon the size of the file review. In this instance, the file was small and they estimated that only 1 hour was expended at subject site.
- (B) In accordance with directions contained in the TDD, actual LOE hours for each site reviewed were maintained by our Region X Seattle office.

## ATTACHMENT NO. 2

Pasco Sanitary Landfill, A/K/A Resource Recovery Corp., Pasco, Wash. (10T67) Recap of Subcontractor's Invoice

TDD NO.	SUBCONTRACTOR	DESCRIPTION OF SERVICES	AMOUNT	
R10-8410-14	Boyle Bros. Drilling CO.	Installation of monitoring wells	\$46,796.00	
Total Applicable	e to Contract No. 68-01-	-6692 (REM/FIT)	\$46,796.00	



## ecology and environment, inc.

ROSSLYN CENTER, 1700 NORTH MOORE ST., ARLINGTON, VA. 22209, TEL. 703-522-6065

International Specialists in the Environment

### MEMORANDUM

T0:

USEPA

Office of Waste Programs Enforcement

FROM:

REM/FIT Zone II

AZPMO-FIT Operations, L. Welzel

DATE:

June 4, 1987

SUBJECT:

Update of Cost Estimates for Field Investigation

Team Effort Under EPA Contracts #68-01-6056 (FIT)

and #68-01-6692 (REM/FIT)

REFERENCE: LF7-06038701

- Over the past three years, various cost analysis techniques for establishing realistic U.S. Government costs for Field Investigation Team (FIT) effort on specific site investigations have been evaluated by EPA and E&E program management personnel. The concept that has been successfully employed under the FIT and REM/FIT programs for several cost recovery negotiations and/or litigations, is based on the parametric distribution of all costs associated with the FIT programs via a unit cost per manhour of effort expended on a specific site.
- Early in the FIT program (1981), our cost analysis indicated that the appropriate rate was approximately \$35.00 per direct labor hour expended on a specific site tasking. This rate was generated by tabulation of all program costs, removing subcontracting expenditures, which are highly variable from site to site, and then dividing by the total number of direct labor hours. The parametric rate could be used to determine the cost associated with a particular site by multiplying the number of direct labor hours expended on an investigation by the \$35.00 per hour rate. and then adding the cost of subcontracts specific to the site to establish the total cost of the investigation.
- While the fully loaded rate of \$35.00 per direct labor hour continued to remain essentially valid, experience and further analysis of this approach have shown that many direct labor hours (management and secretarial effort) are not uniquely charged to specific site investigations, but are spread over several sites. Consequently, not all direct labor hours are identifiable to specific sites and the cost value generated by this methodology is somewhat understated.

4. A more precise method to determine specific site investigation costs under the previous FIT contract evolved through refinement of the earlier technique. The net program costs were again derived by subtracting all subcontracting costs from the overall cost of the contract. This net cost was then divided by the total number of level of effort manhours to arrive at an average cost per manhour of technical personnel. Based on contract costs paid by EPA through November 21, 1986, and time records through the end of the FIT Contract, 31 December 1982, the parametric cost is computed to be \$40.72 per level of effort hour as follows:

e.	Unit Cost Per LOE Hour (c + d)	=	\$ 40.72
d.	LOE (Technical) Hours	=	844,027
c.	NET Distributable Costs (a - b)	=	\$34,369,993
b.	Less Cost of Subcontracts	-	\$ 3,152,808
a.	Total Program Cost including Base Fee and Award Fee	=	\$37,522,801

NOTE: It must be recognized that two major cost elements remain to be resolved which will affect this parametric cost. At issue are overhead and G&A rate adjustments for E&E FY 83, and final settlement of the F.C. Hart Inc. claims for operation of two regional offices. The total unpaid cost is approximately \$260,000. In addition, the program costs cited have not received DCAA final audit for E&E FY 81 through FY 83.

- 5. The above unit cost incorporates all contractor incurred direct and indirect charges associated with the administration, management, and performance under the FIT contract, to include all wages, fringe, overhead, clerical support, travel, office rental and supplies, field equipment, expendable materials, general and administrative expenses, and fees. Subcontracting costs for site specific tasks such as well drilling, surveying, engineering consultants, expert witnesses, etc. are not included in this unit cost. The figure cited also does not address EPA internal costs associated wth the administration and management of the contract, nor the cost of sample analysis performed by EPA or contract laboratories.
- 6. Before application of this parametric cost rate to determine cost recovery values for litigation, another point must be considered. Our initial experience on the FIT contract indicated that 75% of the technical effort was utilized on site specific tasks assigned by Technical Directive Documents (TDD). However at least 25% of all available level of effort hours are expended on essential

investigation activities that cannot be identified or tabulated to specific hazardous waste sites (Non-TDD effort). Some examples are equipment cleaning, repair, and maintenance; instrument calibration; technical literature research; refresher training; planning and coordination of multi-site projects; and, field team management. In recognition of this fact, the number of technical personnel hours that have been charged to a specific site must be multiplied by a factor (previously 1.333) in order to legitimately distribute all costs at the \$40.72 per hour rate derived above. During a DCAA review of the parametic cost recovery methodology conducted on 28 February 1984, the TDD vs. total LOE hours overall program factor was recognized as 1.376 for the FIT program. As a result of Quality Assurance reviews of the site by site time records in late 1986, this factor has now been established as 1.433 for the FIT contract.

7. After the site pro rata costs based on LOE hours are extended and calculated using the parametric factors, the value of the site specific subcontracts can then be added to obtain the total cost of the field investigation effort on a specific hazardous waste site.

### REM/FIT Program Costs and Factors

8. During the period 1 January 1983 through 31 October 1986, all field investigation effort within EPA Regions V through X was charged to the REM/FIT Zone II program (EPA Contract #68-01-6692). At the present time the parametric unit cost per LOE hour comparable to that calculated in the preceding paragraphs is computed to be \$42.49 per hour, as follows:

a. Total FIT Program Cost (includes

all management costs and fees

paid through 31 October 1986) = \$59,662,837

b. Less Cost of Subcontracts - \$ 4,216,087

c. NET Distributable Costs (a - b) = \$55,446,750

d. LOE (Technical) Hours (through 31 October 1986) 1,304,953

e. Unit Cost Per LOE Hour (c + d) = 42.49

9. As in the previous FIT contract, this unit cost will vary significantly as outstanding billings are paid on the REM/FIT program. At the present time, costs of \$1,386,710 have been invoiced but not paid. REM/FIT award fees are distributed on a trimester basis and the above total cost includes only those fee

Page Four LF7-06038701.3

amounts awarded and paid for performance through Evaluation Period #11 which ended 31 May 1986. An Additional award fee billing of nearly \$500,000 is anticipated for PER #12. Some indirect rate adjustments are invoiced at the close of each E & E fiscal year. The supplemental amount for E & E FY87 is expected to be approximately \$180,000. The current factor for allocating Non-TDD LOE effort on the REM/FIT program has been established at 1.349 of 31 January 1987.

cc: S. Fredericks, EPA DPO FIT W. Sellman, CH<sub>2</sub>M Hill

06/04/87

1. Cost Center	1000 1000 1000 1000 1000 1000 1000 100	2. No. R10-B212-02A
CH-633-10 R	EM/FIT ZONE II CONTRACT CONTRACT NO. 68-01-6692	
1A. Account No. TDD ACK	NOWLEDGEMENT OF COMPLETI	ON Interim
	and Waste Division Consolidat	· · · · · · · · · · · · · · · · · · ·
3. Response: Formal Report	X Letter Report ☐ Formal	
File review checklists incom	porating elements needed to f	III out turnaround documents
and to note applicable backlo	og reduction categories were	filled out for each site.
Approximately 630 files were	reviewed for the first time	during April 1983, and an
additional 160 odd files were	e checked again and ESESSES	ESEI had data transferred
from a previous type of check	klist to a new one, with addi	tional data, during May.
Approx. 168 Preliminary Asses	sments were completed during	April. All sites on which
the FIT had not previously we	orked were entered on the Sit	e Tracking System.
4 <del></del>		
3B. Technical Labor Hours Expended	3C. Subcontract Cost	3D. Total Project Cost to Date
930		930 x 40 = \$37,200
Labor hours were	Accepted Accepted with Excepted with Excepted Considerably below estimate.	s many files turned out to
he almost devoid of informat	ion. As a consequence the FI	IT was able to accomplish this
important task on time during	g a very busy period.	The state of the s
	A STATE OF THE PARTY OF THE PAR	
	。1950年南美国的经济的中华的	
6. I certify that the attached materials me all requirements of the subject TDD.	est and comply with	7. Date
Husten H (Contracto	Mot . or RPM Signature)	5/26/83
8. I acknowledge that I have been provide services specified in the subject TDD.	ed with the material and	9. Date = 8. E. S.
WWW.B.S	-RPO Signature)	DF 5/3//32
Sheet 1 White - RPM Copy Sheet 2 Green - RPO Copy Sheet 3 Canary - ZPM Copy Sheet 4 Pink - Project Officer Copy		AZEMO-FIT

					Evers/Brooks
СН	Cost Center -633-10 . Account No.	CON.	FIT ZONE II CONTRAC TRACT NO. 68-01-6692 DIRECTIVE DOCUMEN	т	2. No. R10-8408-22
	Priority:    High   Medium   Low     General Task Descrip	4. Estimate of Technical Hours 60  4A. Estimate of Subcontract Cost  otion: Perform site	5. EPA Site ID  WAD 991281874  5A. EPA Site Name  Resource  Recovery Corp.  inspection of Resou	6. Completion Date: 11/30*	7. Reference Info:    Yes   No     Attached   Pick Up
1) Review EPA and State agency files as appropriate 2) Review background literature on manufacturing processes and industries 3) Set up appointmentscoordinate with D. Flood, EPA 442-2722 and Ned Therien, DOE 459-6352 4) Collect grab samples as appropriate 5) Prepare EPA Form 2070-13 with narrative summary and photo documentation 9/30/ 6) Prepare HRS if site has observed release or potential release 7) Prepare detailed sampling work plan if site requires additional					9/30/84 
	11. Desired Report Form: Formal Report Letter Report Formal Briefing  Other (Specify): EPA Form 2070-13 w/narrative summary				
12.			by 9/30/84; site s tted as necessary b		ring and
13,	Authorizing RPO:	B.S.M. (Signatur	e)	14. Date: 8/	10/84
15.	Received By:	Accepted Accepted (Contractor RPM	3/17/	ejected 16. Date:	8/84

1. Cost Center CH-633-10 REM/FIT ZONE II CONTRACT CONTRACT NO. 68-01-6692 TDD ACKNOWLEDGEMENT OF COMPLETION Resource Recovery: SI/HRS  3. Response: XX Formal Report					2. No. R10-8408-22    Complete   Interim      Other (Specify):	
	SI submitted:	1/21/85				
	HRS submitted: 4/8/85					
3B. Technical Laborated 33		3C. Subcontract Cost	3D.		ject Cost to Date 34 hrs.	
4. FIT-RPO Action	×	Accepted	epted with Exception	ns 🗆	Rejected	
5. Comments:						
6. I certify that the all requirements	attached materials mee of the subject TDD.	RPM Signature)		7.	A/16/85	
8. I acknowledge the services specified	nat I have been provided I in the subject TDD.	with the material and		9.	Date	
>	In E	Color Signature)			4/22/85	

h				:/Auen/Esias
1. Cost Center CH-633-10		TIT ZONE II CONTRACT		2. . P10 9410 06
1A. Account No.	TECHNICAL D	RECTIVE DOCUMENT (TDE	4 100v	No. R10-8410-06
3. Priority:	4. Estimate of Technical Hours	5. EPA Site ID . 6. Com	pletion Date:	7. Reference Info:
☐ High	10	WAD 991281874		Yes No
☐ Medium	4A. Estimate of Subcontract Cost	5A. EPA Site Name	/8/	☐ Attached
Low		Resource Recovery Corp.	.704	Pick Up
8. General Task Descri		nples collected at Resour	re Recovery	Corp
quarity assu	arance review or sai	ipres corrected at Resour	CC NCCOVCI y	
9. Specific Elements: 1). Five da	ata sets			10. Interim Deadlines
	ntact: J. Osborn 4	12-0837		
		to P. Evers, E&E for SI	report.	
37. 1104140	copy or an a auda			W. 1
		3		
11. Desired Report Fo	orm: Formal Repo	rt 🔲 Letter Report	☐ Forma	l Briefing
Other (Speci	fy):			
12. Comments:				
•				
13. Authorizing RPO:	n E O p / (Signatu	T(re)	14. Date:	0/22/84
15. Received By:	Accepted Accepted	d with Exceptions	16. Date:	
1)0	id A. Bu	~ (~.	10/	19/89
	(Contractor RPM	Signature)		

1. Cost Center CH-633-10 1A. Account No.	TDD ACK	EM/FIT ZONE II CONTRACT CONTRACT NO. 68-01-6692 NOWLEDGEMENT OF COMPLET Recovery Corp: QA of Data	Dec 11.	2. No. <u>R10-8410-06</u> X Complete  Interim
3. Response:	Formal Report	▼ Letter Report	1	Other (Specify):
	QA submitted on			
	A submitted on 1	1/27/84		
Case No:	3206			
-				
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	· · · · · · · · · · · · · · · · · · ·			
				-
3B. Technical Lab	or Hours Expended	3C. Subcontract Cost	3D. Total Pr	oject Cost to Date
21			21 h	rs.
	<u></u>			l Delegand
4. FIT-RPO Action	n )24	Accepted Accepted with Exc	eptions	Rejected
5. Comments:				
6. I certify that the	e attached materials mee	t and comply with	7.	Date
all requirements	of the subject TDD.			
				12/5/84
	(Contractor	RPM Signature)	-	12/3/84
	hat I have been provided in the subject TDD.	I with the material and	9.	Date
	(FIT-	RPO Signature)	_	12/10/24

1. Cost Genter CH-633-10 1A. Account No.	CON	REM/FIT ZONE II CONTRACT CONTRACT NO. 68-01-6692 TECHNICAL DIRECTIVE DOCUMENT (TDD)		
3. Priority:    Migh   Medium   Low	4. Estimate of Technical Hours  1000  4A. Estimate of Subcontract Cost  \$10,000	5. EPA Site ID  5A. EPA Site Name Resource Recovery Landf111	6. Completion Date:	7. Reference Info:  Yes No Attached Pick Up
-	Description:	ls, sediments, and	water at Resourc	e Recovery
1nfo 2). Cond work 3). Deve 4). F1e1 5). EPA	in and review all recommation  uct recommassiance visual plan including appropriately sampling work contacts: J. Osborn  B. Eusebio	sit for development riate interviews with concurrence f 442-0837 442-1491	of sampling	10. Interim Deadlines
12. Comments:				
13. Authorizing R	PO: (Signatu	rel	14. Date:	0/24/24
15. Received By:		4.1	Rejected 16. Date:	19/84

	B	/ //		WA0280
CH-633-10	JUN 27 1986 TDD ACK	EM/FIT ZONE II CON CONTRACT NO. 68-0 CNOWLEDGEMENT O	1-6692 F COMPLETION	2. No.R10-8410-14
as the same of the	Formal Report	Letter Report	☐ Formal Briefing	Other (Specify):
F	inal report s	ubmitted on 6/18/8	36	
3B, Technical Labor Ho	ours Expended	3C. Subcontract Cost	3D. To	otal Project Cost to Date
3078		\$46,796		3078 hours
4. FIT-RPO Action	A	Accepted	epted with Exceptions	Rejected
5. Comments:				
6. I certify that the atta all requirements of th	ched materials meet ne subject TDD.	Zullne		7. Date 6/23/86
8. I acknowledge that I I services specified in the	he subject TDD.	with the material and	~	9. Date 6/23/86

0 3			E & E	
1. Cost Center CH-633-10	00117	IT ZONE II CONTRAC TRACT NO. 68-01-6692 DIRECTIVE DOCUMEN	(LDD) nr 8 12 by	8507-01
			1. 3illi	5(0)
3. Priority:	4. Estimate of Technical Hours 600	5. EPA Site ID 6.	Сомприни Дале Г	7. Reference Info:
☐ Medium	4A. Estimate of Subcontract Cost	5A. EPA Site Name	9/30/85	Attached Pick Up
8. General Task De	escription: Quality Assu		ytical results*	
THE RESERVE THE PERSON NAMED IN COLUMN TWO IS NOT THE PERSON NAMED IN COLUMN TWO IS NAMED IN COLUMN TWO I	QA'd copy of result		ject manager	10. Interim Deadlines
11. Desired Report	a Form:  Formal Repo		ort	Briefing
Other (Sp	pecify):			
to this T	All analytical resulDD. Individual waste	ts QA'd during this site numbers will b	time period will e used so that h	be charged nours can be
13. Authorizing RI	PO: (Signatu	of the state of th	14. Date:	12/25
15. Received By:	Accepted Accepte	ll-en	jected 16. Date:	1/85

Jan Angelia de Mississe de Mis		
1. Cost Center CH-633-10  1A. Account No.	REM/FIT ZONE II CONTRACT CONTRACT NO. 68-01-6692 TDD ACKNOWLEDGEMENT OF COMPLETION QA of Data	2. No. R10-8507-01  Complete  Interim
OR 0005 OR 0010 OR 0011 OR 0077 OR 0092 OR 0147	: Prudhoe Bay - 8 hrs. OR 0169: McGovern/Se : Bunker Hill - 15 hrs. WA 0006: Tulalip Lan : Deming - 11 hrs. WA 0008: N.W. Trans. : Alkali Lake - 8 hrs. WA 0018: Lakewood-58 : NuWay Oil - 120 hrs. WA 0021: Tacoma Tar : St. John's Ldfl 32 hrs. WA 0022: West. Proce : J.H. Baxter - 24 hrs. WA 0035: WEIL 12-A - : Day Island Ldfl. 91 hrs. WA 0043: So. Tac. Ch	fill - 13 hrs. ssler-23 hrs. dfill - 23 hrs 7 hrs. hrs. Pits - 127 hrs. ss 99 hrs. 76 hrs. annel - 16 hrs.
1241 hrs.  4. FIT-RPO Action Accepted Accepted with Exceptions Rejected		
5. Comments:		
6. I certify that t	ts of the subject TDD.   Twelful or (Contractor RPM Signature)	7. Date  18/7/85
8. I acknowledge services specif	that I have been provided with the material and led in the subject TDD.  (FIT-RPO Signature)	9. Date